

AMENDMENTS TO THE CLAIM

This listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A method of predicting an initial value of an analyte in a sample, said method comprising the steps of:
 - making a plurality of observations on a plurality of samples, wherein each observation includes a plurality of variables associated with said samples,
 - generating an equation which approximates said plurality of observations, said equation containing a quadratic term for storage time, a quadratic term for storage temperature, and a mixed term for storage time and storage temperature,
 - measuring a sample analyte value after storing said sample for a known non-zero time, said sample having associated therewith a container type, a storage time, and a storage temperature,
 - inputting said container type, said storage time, said storage temperature, and said analyte value into said equation, and
 - solving said equation to obtain an estimated initial analyte value.
2. (Original) The method of claim 1, further comprising the step of solving said equation for initial analyte value as a function of container type, storage time, and storage temperature.
3. (Original) The method of claim 1, wherein said sample is a blood sample.
4. (Original) The method of claim 1, wherein the plurality of variables associated with said sample comprises an actual initial analyte level, an actual subsequent analyte level, a time since the sample was taken, and a temperature at which said sample was stored.

5. (Original) The method of claim 1, wherein the plurality of variables associated with said sample comprises an actual initial analyte level, an actual subsequent analyte level, a time since the sample was taken, and a type of container in which said sample was stored.
6. (Original) The method of claim 1, wherein the plurality of variables associated with said sample comprises an actual initial analyte level, an actual subsequent analyte level, a temperature at which the sample was stored, and a type of container in which said sample was stored.
7. (Original) The method of claim 1, wherein the plurality of variables associated with said sample comprises an actual initial analyte level, an actual subsequent analyte level, a time since the sample was taken, a temperature at which said sample was stored, and a type of container in which said sample was stored.
8. (Currently amended) A method of predicting an initial value of an analyte in a sample, said method comprising the steps of:
 - determining a level of an analyte in a sample after storing said sample for a known non-zero time, said sample having associated therewith at least one factor selected from the group consisting of a container type, a storage time, and a storage temperature,
 - inputting said at least one factor and said analyte level into an equation, said equation containing a quadratic term for storage time, a quadratic term for storage temperature, and a mixed term for storage time and storage temperature, and
 - solving said equation to obtain an estimated initial analyte value.
9. (Original) The method of claim 8, wherein said equation represents analyte level as a function of storage time.
10. (Original) The method of claim 8, wherein said equation represents analyte level as a function of storage temperature.

11. (Original) The method of claim 8, wherein said equation represents analyte level as a function of container type.

12. (Original) The method of claim 8, wherein said equation represents analyte level as a function of storage temperature and storage time.

13. (Original) The method of claim 8, wherein said equation represents analyte level as a function of storage temperature and container type.

14. (Original) The method of claim 8, wherein said equation represents analyte level as a function of storage time and container type.

15. (Original) The method of claim 8, wherein said equation represents analyte level as a function of storage temperature, storage time, and container type.

16. (Original) The method of claim 8, wherein said sample is a blood sample.

17-18. (Cancelled)

19. (Previously presented) A system for estimating an initial value of an analyte in a sample, said system comprising:

an analyzer adapted to analyze the actual level of an analyte in a sample,

an estimator adapted to estimate said initial value of said analyte based on a plurality of variables, said variables including said actual level of said analyte, a storage time, a storage temperature, and a container type, and

an output adapted to present said estimated initial value;

wherein said estimator estimates said initial level using an equation associated with said analyte, said equation adapted to solve for initial analyte level as a function of actual analyte level, storage time, storage temperature, and container type; and

wherein said equation contains a quadratic term for time, a quadratic term for temperature, and a mixed term for time and temperature.

20. (Currently amended) The system of claim 19[17], wherein said sample is a blood sample.

21-30. (Cancelled)